

REMARKS

The Amendment

The Final Office Action dated June 2, 2005, has been reviewed carefully and some of the claims have been amended in a sincere effort to place them in condition for allowance. Reconsideration of rejection of those claims previously rejected and allowance of the same are respectfully requested. More specifically, dependent claims 27 has been amended into dependent claim 3, claims 28-32 have been amended for clarity, and claims 33-35 have been added. New claim 33 is essentially the same claim as amended claim 3, except depending from independent claim 28. New claims 34-35 are directed to a quenching temperature for the quenching immediately after casting.

The Invention

The invention provides a continuous process to form conventional aluminum alloy of either T or O temper on a single machine wherein the T and O tempers from the process meet the criteria defined by the Aluminum Association. The invention is a significant advancement over the prior art in that *conventional T and O tempers are formed in a in-line process*. While other tempers have been made in an in-line process, it has long been a goal in the field of metallurgy to produce T or O tempers *in-line*. Such a process carries important and significant value in the marketplace as it substantially reduces the time it takes to process the alloys from the time they are feedstock to the time they are T or O temper alloys. In the present invention, this is achieved by rapidly processing the feedstock through the steps claimed in claim 1 or 28, thereby controlling the grain size of the feedstock and allowing solute of the feedstock (magnesium, silicone, etc.) to stay in solute (aluminum) throughout the process. Additionally, the thinness of the initially cast strip and the speed of the process contributes to the overall ability to have improved retention of solute in solution.

The process includes the steps of providing a continuously-cast aluminum alloy strip as feedstock; quenching the feedstock to a preferred hot rolling temperature; immediately hot or warm rolling the quenched feedstock to the required thickness, annealing or solution heat-treating the feedstock in-line depending on whether a T or O temper is desired to produce the T or O temper aluminum alloy sheet. Claim 3 has been amended to claim tension leveling and coiling of the sheet without requiring prior cold rolling. Essentially, as stated, prior dependent claims 27 has been amended into claim 3 and claim 33 has been added. Claim 27 has been cancelled.

Independent claim 28 is similar to independent claim 1, further providing a step of selectively quenching after the annealing or solution heat treating. As now amended, claim 28 claims alternate criteria to produce either a T or O temper. New claim 33 depends from claim 28 and is directed to an additional step of tension leveling and coiling without requiring cold rolling.

Claims 1, 4-7, 10-13, 15-18, 21, 22 and 27-32; Rejected Under 35 U.S.C. § 103(a) by United States Patent 5,769,972 to Sun

The above claims are rejected under 35 U.S.C. § 103(a) as being unpatentable in view of Sun. Sun is cited for teaching a process of manufacturing an aluminum alloy sheet stock by continuously casting a strip, hot rolling the strip, and annealing the strip.

Regarding the quenching step immediately after casting

The examiner cites Sun for teaching that (a) it is known in the art to water quench after casting and prior to further heat treating, and (b) it is known that quenching after casting, though less energy efficient, achieves a strong dilute aluminum alloy. See page 2 of Final Office Action. Applicants disagree, however, that Sun teaches quenching after casting and before hot rolling. Instead, Sun is disclosing a rapid quenching *after* the hot rolling, *not*

immediately after the casting of the feedstock and prior to the hot rolling as claimed in the present invention. Specifically, regarding part (a), above, Sun dismisses quenching immediately prior to annealing as thermodynamically inefficient. The Examiner takes this to mean that quenching after casting and prior to hot rolling is disclosed. However, when Sun discusses what type of quenching is being dismissed, as in part (b), above, Sun references Ser. No. 531,554, since matured into Patent No. 5,772,799, as disclosing the action of rapidly quenching feedstock. The referenced '799 patent, however, clearly states that the rapid quenching occurs after hot rolling and prior to cold rolling. See Column 4, lines 3-20 and Fig. 1 of the '799 patent. Essentially, the rapid quenching that was removed as thermodynamically inefficient in Sun refers to quenching that occurs immediately prior to annealing and after hot rolling as disclosed in '799. Therefore, there is no quenching disclosed immediately after casting in Sun.

It is important to note that the difference between quenching immediately after casting and prior to hot or warm rolling, as opposed to quenching after hot or warm rolling, is significant. The two quenching techniques were found to have different purposes. It was surprisingly found that the quenching step after casting but before hot or warm rolling can effectively control grain size in the feedstock. See Applicants specification, page 12, lines 8-18. For example, as stated in Applicants' specification, very fine grain size, if desired, can be achieved by quenching the strip to about 700°F, as now generally claimed in dependent claims 34 and 35. By contrast, the purpose of quenching after hot or warm rolling is to keep alloying elements in solution. See Sun, column 6, lines 26-29.

The Examiner goes on, however, to state that quenching prior to rolling was "necessarily" disclosed in Sun because, although quenching was not specifically disclosed, the temperature of the hot roller is less than that of the casting temperature. See page 3, lines 2-6 of the Action, citing Column 6, line 20 of Sun. In response, Applicants note that quenching is a physical, affirmative cooling step. The mere citing of temperature at which operations are *performed* does not imply that a temperature is physically cooled in

between. Further, Sun teaches the hot rolling *exit* temperature. See Column 6, line 20. It says nothing of the temperature that must be achieved in between the casting and the hot rolling. There is absolutely no implication of necessary cooling. Additionally, by the Examiner's own admission, Sun dismisses quenching prior to annealing as being thermodynamically inefficient and specifically discloses that there is no quenching until after annealing. See Column 2, lines 47-50. How Sun can specifically dismiss any quenching prior to annealing and yet "necessarily teach" quenching prior to rolling, which is prior to annealing, is unknown.

Thus, Sun does not teach casting followed by quenching for immediate feeding into a hot or warm rolling mill as claimed in Applicants' Claim 1. As stated in, *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991), a copy of which is provided herewith for the Examiner's convenience, "both the suggestion [to make the claimed apparatus] and the reasonable expectation of success must be found in the prior art, not in the Applicants' disclosure." Therefore, even if Sun discloses certain components of the present invention, it does not disclose or suggest the specific order of steps as claimed by Applicants or the advantages attendant thereto, for example, rapid production of T or O defined tempers that can be tension leveled without requiring cold rolling.

Regarding the formation of T or O tempers

In the response by Applicants on March 7, 2005, Applicants amended the claims to further emphasize the fact that the process is forming T or O tempers in a in-line sequence. In the rejection of Applicants claims over Sun (numbered paragraph 2), the Examiner did not significantly acknowledge the inclusion of this amendment. The Examiner only addresses and swiftly discounts the inclusion in numbered paragraph 12, wherein it is stated that "the prior art teaches steps of annealing or solution heat treating, thereby providing said temper conditions." This statement represents a basic misunderstanding. The Examiner seems to be reading step (iv) of claim 1, namely "annealing or solution heat-treating the feedstock

in-line, depending on the T or O temper desired, to produce the aluminum alloy sheet,” as claiming that the formation of a T or O temper is simply the result of performing annealing or solution heat treating. The formation of T or O temper, however, is dependent on the entire four step process. The last step is only a final determinant as to whether T or O temper is formed. Certainly the Examiner would agree that the mere performance of annealing or solution heat treating, which are both known processes, are themselves not responsible for the specific temper formation, else every process that uses one of these steps would create only T or O tempers regardless of any other criteria or process step. Thus, the mere recitation of annealing or solution heat treating in cited references is not enabling disclosure of the formation of a T or O temper, and thus Applicants’ invention is not made obvious by Sun under §103.

Further, Sun does not even teach solution heat treating. In column 6, lines 23-29, Sun does state that the “annealing step in which the feedstock is subjected to solution heat treatment to cause recrystallization...” However, solution heat treatment is not truly happening in Sun. It is not possible to conduct annealing and solution heat treating at the same time. Only one can be performed at any one time. In the case of Sun, it is clear that only annealing is being performed. This is evidenced by the fact that in the remainder of the specification, figures and claims, only annealing is mentioned. Thus, the reference of solution heat treatment as performed by annealing is in error, and one skilled in the art would instantly know this. Therefore, Applicants’ invention is not made obvious by Sun under §103. Along these lines, claims 16-19 are likewise not made obvious by Sun.

Beyond this, and more importantly, Sun does not teach the formation of T or O tempers. Sun, which is commonly owned by Applicant and shares a common inventor with the present application, teaches a formation of a special temper, which, in-house, is called a “micromill temper”. “Micromill tempers” have different properties than defined T or O tempers. There is no express teaching or mention of T or O tempers in Sun, and there is no data that supports the formation of T or O tempers with properties defined by the

Aluminum Association. The Applicant's invention, however, *does* teach T or O tempers and provides support for such, as shown in the examples and the data. See, for example, table 1, page 10; table 3, page 12; table 5, page 15; Examples 3 and 4, pages 16-17. As stated earlier, the formation of T or O tempers in-line has long been a goal in the field of metallurgy. Thus, while Applicants' invention achieves this goal, Sun does not, and such a difference is surprising and by no means obvious. Thus, Sun does not make Applicants' invention obvious.

Regarding independent claim 28 and dependent claims 29-32.

Sun does not teach alternatively solution heat treating or annealing on the same in-line process. The Examiner rejected independent claim 28 as obvious by stating "Sun teaches a process of working and heat treating as presently claimed, including the steps of annealing." For the solution heat treating, the Examiner cites column 6, lines 22-23 of Sun, which states "the annealing step in which feedstock is subjected to solution heat treatment..." As noted above, this is impossible, as annealing and solution heat treating are separate procedures. It is believed that Sun actually intended the step to be an annealing step. Even taken at face value, however, this statement means that the annealing and solution heat treating are done together, at the same time, which does relate to Applicants' claim of alternately choosing annealing or solution heat treating. Thus, either way, Sun could not disclose the step of "selectively proceeding according to a first set of alternate criteria depending on a T or O temper desired," wherein the feedstock is alternatively annealed for an O temper or solution heat treated for a T temper as claimed in claims 28-32.

Further, such a difference is not obvious. It is well-settled that there must be motivation within a single reference to alter the reference to find patent claims obvious. *SIBIA Neurosciences, Inc. v. Cadus Pharm. Corp.*, 225 F.3d 1349, 1360 (Fed. Cir. 2000). A copy of this case is enclosed herewith for the convenience of the Examiner. Sun provides

no motivation, nor does the Examiner reference a motivation, for one skilled in the art to alter the straight line method of Sun into a method proceeding according to a set of alternating first criteria and an alternating set of second criteria. Thus, Applicants' invention is not obvious over Sun.

Additionally, as noted by Applicants, neither Sun nor Wyatt-Mair (below) ever define their tempers as T or O, let alone as alternatively T or O, as explicitly claimed and taught by Applicant. See Applicants' specification, Tables 1, 3 and 5 on pages 10, 12, and 15 of the specification, respectively. T or O tempers are not taught, described or supported by Sun or Wyatt-Mair. Applicants' invention is a significant and valuable advance, as T or O tempers have never been created in a single in-line process before.

Therefore, Applicants' independent claims 1 and 28 are not made obvious by Sun under §103 and are allowable. As claims 4-7, 10-13, 15-18, 21, 22 and 29-35 are dependent on claims 1 or 28 either directly or through dependencies, they are likewise allowable.

Regarding claim 27 (amended into claim 3), specifically the lack of required cold rolling after annealing or solution heat treating.

The Examiner states that although cold rolling is specifically mentioned in Sun to stabilize the product, "not performing the step when the action is not desired is an obvious improvement." See page 3-4 of Action. The law cited by Examiner, however, is not on point. Each of the cases cited, as Examiner notes, involves the deletion of a function when the result of that function is not needed or wanted. For example, in *Ex Parte Wu*, 10 USPQ2d 2031 (Bd. Pat. App. & Inter. 1989), salts that are useful in metals that contact fresh water were not desired in metals that did not encounter fresh water.

In the present invention, however, the function of cold rolling *is* desired, but can expediently be achieved without actually performing the cold rolling. Part of the issue here

is that the Examiner omits a reason for cold rolling. On the first line of page 4, the Examiner states that the purpose of cold rolling is “to reduce sheet thickness.” However, the purpose of cold rolling at the end of a method is often to provide enough tension in the alloy so that tension leveling can be performed without breakage. It is a significant advantage of the present invention that no such cold rolling is required to perform tension leveling and coiling. As the Examiner herself notes, the “omission of an element and retention of its function is an indicia of unobviousness.” In re Edge, 359 F.2d 896, 149 USPQ 566 (CCPA 1966). Here, cold rolling was omitted, but its function of tension production was retained, and this claim is not obvious over Sun under §103.

Claims 1, 4-7, 10-13, 15-18, 21 and 23, 27-32; Rejected Under 35 U.S.C. § 103(a) by United States Patent 5,514,228 to Wyatt-Mair

The above claims are rejected under 35 U.S.C. § 103(a) as being unpatentable over Wyatt-Mair. Wyatt-Mair is directed to a method of manufacturing aluminum wherein feedstock is rolled and then annealed without intermediate cooling.

Regarding the quenching step immediately after casting

Like Sun, above, the Examiner cites Wyatt-Mair for the proposition that while quenching after casting and before hot or warm rolling is not actually disclosed in Wyatt-Mair, it “necessarily teaches” quenching at that stage. However, like Sun, Wyatt-Mair only discloses the hot rolling exit temperature. It does not disclose the temperature of feedstock entering the rolling mill or any intermediate action. The Examiner attempts to predict the rolling mill entry temperature by saying it is necessarily greater than the 600-1000°F exit temperature. The Examiner further states that the casting temperature is 400-900°F. The Examiner then concludes that the casting temperature of 400-900°F is greater than the rolling temperature of 600+-1000+°F, and therefore quenching was necessarily taught. This reasoning is flawed on two fronts. First, a casting temperature of 400-900°F is never

actually disclosed anywhere in the Wyatt-Mair patent. It is unclear where the Examiner draws her support for this. Second, the range of casting temperature cited by the Examiner is clearly lower than the range of the rolling temperature which the Examiner has speculated. The idea that some level of overlap between the two ranges ‘necessitates the teaching of quenching’ is unsupported. Quenching is a physical, proactive step that cannot be prima facie taught to one skilled in the art when moving a feedstock from a generally lower temperature range to a generally higher one.

Regarding the formation of T or O tempers

In the response by Applicants on March 7, 2005, Applicants amended claim 1 to further emphasize the fact that the process is forming T or O tempers in a single in-line sequence. In the rejection of Applicants claims over Wyatt-Mair (point 3), the Examiner did not significantly acknowledge the inclusion of this amendment. The Examiner only addresses and swiftly discounts the inclusion in point 12, wherein it is stated that “the prior art teaches steps of annealing or solution heat treating, thereby providing said temper conditions.” As stated previously, the Examiner seems to be reading step (iv) of claim 1, “annealing or solution heat-treating the feedstock in-line, depending on the T or O temper desired, to produce the aluminum alloy sheet,” as claiming that the formation of a T or O temper is simply the result of performing annealing or solution heat treating. However, the formation of T or O temper is dependent on the entire four step process. The last step is only a final determinant as to whether T or O temper is formed. The mere recitation of annealing or solution heat treating in cited references is not enabling disclosure of the formation of a T or O temper.

Further, Wyatt-Mair does not teach solution heat treating independent of annealing. In column 32, lines 8-10, Wyatt-Mair states that the “feedstock is thereafter annealed and solution heat treated.” Nowhere in the disclosure is solution heat treating mentioned as

performed independently of annealing. In contrast, Applicants claim 1 and 28 clearly support alternative actions. For example, in claim 1, it is claimed in step (iv) that "annealing *or* solution heat-treating the feedstock in-line, *depending* on the T or O temper desired." (Emphasis added.)

Beyond this, and more importantly, Wyatt-Mair does not teach the formation of T or O tempers. Wyatt-Mair, which is commonly owned by Applicant and shares a common inventor with the present application, teaches a formation of a different type of temper. There is no express teaching or mention of T or O tempers in Wyatt-Mair, and there is no data that supports the formation of T or O tempers with properties defined by the Aluminum Association. The Applicant's invention, however, does teach T or O tempers and provides support for such, as shown in the examples and the data. See, for example, table 1, page 10; table 3, page 12; table 5, page 15; Examples 3 and 4, pages 16-17. As stated earlier, the formation of T or O tempers in-line has long been a goal in the field of metallurgy. Thus, while Applicants' invention achieves this goal, Wyatt-Mair does not, and such a difference is surprising and by no means obvious.

Regarding independent claim 28 and dependent claims 29-32.

Wyatt-Mair does not teach the steps of selectively proceeding according to a first set of alternate criteria depending on a T or O temper desired as claimed in claim 28. In the action, the Examiner cites annealing to create an O temper as disclosed in column 3 and line 12 of Wyatt-Mair, wherein it is disclosed that "the hot reduced feedstock is thereafter annealed and solution heat treated without substantial intermediate cooling," and then cites solution heat treating to create a T temper as disclosed in claim 1, line 9, wherein it is claimed that the feedstock is "annealing and solution heat treating the reduced feedstock without intermediate cooling..."

In other words, the Examiner cited *virtually the same exact phrase*- once written in the specification and once written in the claims- to show two *alternate* actions claimed by the Applicants. How the action disclosed in the specification can create O tempers while the virtually identical language in the claims creates T tempers is never explained by the Examiner. Further, as discussed above, by the plain language of the disclosure, both annealing and solution heat treating are being performed on the same feedstock. There are never disclosed independently or alternatively of each other. There is no disclosure for forming a T temper with one set of criteria (for example, solution heat treating) or an O temper with an alternate set of criteria (for example, annealing), as claimed in Applicants' invention. Further, the terms T and O temper are never even mentioned in Wyatt-Mair.

Such a difference is not obvious. It is well-settled that there must be motivation within a single reference to alter the reference to find patent claims obvious. *SIBIA Neurosciences, Inc. v. Cadus Pharm. Corp.*, 225 F.3d 1349, 1360 (Fed. Cir. 2000). Wyatt-Mair provides no motivation for one skilled in the art to alter the straight line method of Wyatt-Mair into a method proceeding according to a set of alternating first criteria and an alternating set of second criteria.

Therefore, Applicants' independent claims 1 and 28 are not made obvious by Wyatt-Mair under §103 and are allowable. As claims 3-26 and 29-35 are depend on claims 1 or 28 either directly or through dependencies, they are likewise allowable.

Regarding claim 27 (amended into claim 3), specifically the lack of required cold rolling after annealing or solution heat treating.

The Examiner states that although cold rolling is specifically mentioned in Wyatt-Mair to stabilize the product, because "not performing the step when the action is not desired is an obvious improvement." See page 6 of Action. As stated above, however, in the present invention, the function of cold rolling *is* desired, but can expediently be achieved without

actually performing the cold rolling. As the Examiner herself notes, the “omission of an element and retention of its function is an indicia of unobviousness.” *In re Edge*, 359 F.2d 896, 149 USPQ 566 (CCPA 1966). Here, cold rolling was omitted, but its function of tension production was retained. As stated prior, part of the issue here is that the Examiner omits a reason for cold rolling. The Examiner states that the purpose of cold rolling is “to reduce sheet thickness.” However, the purpose of cold rolling at the end of a method is often to provide enough tension in the alloy so that tension leveling can be performed without breakage. It is a significant advantage of the present invention that no such cold rolling is required to perform tension leveling and coiling.

Claims 1, 4-7, 9-13, 15-18, 21-23, 27-32 are rejected under 35 U.S.C. 103(a) over Sun or Wyatt-Mair et al. in further view of Zonker.

Zonker is cited for teaching water quenching after casting and before hot rolling. See column 5, lines 62-42. However, the process that Zonker teaches is to quench the alloys down to room temperature and then reheat to 510 degrees in about *five minutes* prior to hot rolling. In contrast, the present invention claims “quenching the feedstock *to a* temperature for *immediate* feeding into a hot or warm rolling mill” (emphasis added). Further, this is not an obvious difference, as Zonker is directed to a slower, non-in-line process. For example, the slabs of Zonker are slow cooled after hot rolling at a rate of 10°C *per hour*. See column 6, lines 1-2. In contrast, the present invention specifically claims an “in-line” process.

As stated in, *In re Geiger*, 815 F.2d 686, 2 U.S.P.Q.2d 1276 (Fed. Cir. 1987), a copy of which is provided herewith for the Examiner’s convenience, “obviousness cannot be established by combining teachings of the prior art to produce the claimed invention, *absent some teaching, suggestion, or incentive supporting combination*” (emphasis added). There is no motivation to combine the results from a non-in-line process such as Zonker with an in-line process as Wyatt Mair or Sun.

It is further submitted that the arguments cited above against Sun and Wyatt-Mair are equally applicable here. Thus, Zonker does not teach or make obvious the invention as claimed in the Applicants' amended claims, wherein an aluminum alloy sheet in a continuous in-line process is continuously cast, quenched to a preferred hot rolling temperature, immediately hot or warm rolled, and annealed or solution heat-treated in-line depending on the alloy and the T or O temper desired as claimed in Applicants' amended claim 1, nor does it show the alternative criteria of amended claim 28. Therefore, claims 1, 4-7, 9-13, 15-18, 21-23 and 28-32 are not obvious over the above reference.

Claim 3 is rejected under 35 U.S.C. 103(a) over Sun or Wyatt-Mair in further view of United States Patent No. 5,106,429 to McAuliffe.

McAuliffe teaches a process wherein an alloy of a particular composition is cast into a cast strip, hot rolled, annealed, cold rolled and tension leveled. See Column 6, lines 51-53. According to McAuliffe, the cold rolling reduces thickness, provides better uniformity (column 8, lines 13-15), reduces earing (column 8, lines 45-47), and stabilizes (column 8, lines 58-60). The stabilization reduces the physical properties of the aluminum so that the aluminum sheet will not experience any substantial decrease in strength during subsequent processing. See column 9, lines 7-10. The tension leveling achieves a more uniform flatness after the final cold rolling pass. See column 23, lines 11-14.

Thus, McAuliffe teaches tension leveling only after the stabilizing effects of cold rolling. As previously stated, it is a significant advantage of the present invention that cold rolling is not required to retain the functions of cold rolling, namely the production of tension and the resistance to breakage. Thus, as claimed in claim 3 of the present invention, tension leveling and coiling the feedstock can be performed without cold rolling prior to the tension leveling and the coiling the aluminum alloy sheet. Thus, combination of Zonker

with Sun or Wyatt-Mair would not result in the present invention, and it would not be obvious for one skilled in the art to use the teachings of McAuliffe to tension level the alloy immediately after annealing or solution heat treating without stabilizing the alloy with cold rolling. Therefore amended claim 3 is not obvious over the cited references.

Claims 14 and 19 are rejected under 35 U.S.C. 103(a) over Sun or Wyatt-Mair in further view of “ASM Handbook: Vol. 4 Heat Treating” pp. 851-857.

The ASM handbook teaches air quenching and air plus water quenching. Claims 14 and 19 are not asserted as independently contributing to patentability apart from the independency on rewritten independent Claim 1, dependent claims 11 and 13 (for claim 14), and dependent claims 16 and 18 (for claim 19). It is submitted, however, that the arguments cited regarding Sun and Wyatt-Mair are equally applicable here. Thus, the ASM handbook does not teach or make obvious the invention as claimed in the Applicants’ amended claims, wherein an aluminum alloy sheet in a continuous in-line process is continuously cast, quenched to a preferred hot rolling temperature, immediately hot or warm rolled, and annealed or solution heat-treated in-line depending on the alloy and the T or O temper desired, as claimed in Applicants’ amended claim 1. Therefore, as they depend from claim 1 through intervening claims 11 and 13 (for claim 14), and 16 and 18 (for claim 19), claims 14 and 19 are not obvious over the above reference.

Claim 20 is rejected under 35 U.S.C. 103(a) over Sun optionally combined with Zonker.

Sun teaches a final cast thickness similar to that of the present invention. Claim 20 is not asserted as independently contributing to patentability apart from the independency on rewritten dependent claim 16 and independent claim 1. However, Sun, as argued previously, does not teach or make obvious the invention as claimed in the Applicants’ amended claims, wherein an aluminum alloy sheet in a continuous in-line process is continuously cast, quenched to a preferred hot rolling temperature, immediately hot or

warm rolled, and annealed or solution heat-treated in-line depending on the alloy and the T or O temper desired, and as claimed in Applicants' amended claim 1. Therefore, as it depends from claim 1 through intervening claim 16, claim 20 is not obvious over the above reference.

Claims 23-26 are rejected under 35 U.S.C. 103(a) over Sun or Wyatt-Mair in further view of United States Patent No. 5,833,775 to Newton.

Newton teaches use of additional rolling steps. Claims 23-26 are not asserted as independently contributing to patentability apart from the independency on rewritten independent claim 1 and any intervening claim. However, Sun or Wyatt-Mair, as argued previously, do not teach or make obvious the invention as claimed in the Applicants' amended claims, wherein an aluminum alloy sheet in a continuous in-line process is continuously cast, quenched to a preferred hot rolling temperature, immediately hot or warm rolled, and annealed or solution heat-treated in-line depending on the alloy and the T or O temper desired as claimed in Applicants' amended claim 1. Therefore, as claims 23-26 depend from claim 1 either directly or through intervening claims, claims 23-26 are not obvious over the cited references.

CONCLUSION

It is submitted that the present amendment obviates the rejections under 35 U.S.C. § 103 by the cited references. As it would appear that Claims 1 and 3-26 and 28-35 are in proper form for the issuance of a Notice of Allowance, such action is respectfully requested at an early date.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'EL' followed by a long horizontal stroke.

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